

## 1.Description

The LESD8LL5.0C is designed to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in cellular phones, MP3 players, digital cameras and many other portable applications where board space is at a premium.

## 3.Features

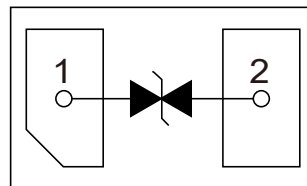
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection
- We declare that the material of product compliant with RoHS requirements and Halogen Free.

## 2.Applications

- Cellular phones audio
- MP3 players
- Digital cameras
- Portable applications
- mobile telephone

- ESD Rating of Class 3(>16kV) per Human Body Model
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

## 4.Pinning information



**SOD-882**



## 5. Absolute Ratings ( $T_{amb}=25^{\circ}\text{C}$ )

Parameter	Symbol	Value	Units
IEC61000-4-2 (ESD)	air discharge contact discharge	$\pm 15$	kV
		$\pm 8$	kV
ESD Voltage Per Human Body Model		16	kV
Total Power Dissipation on FR-5 Board (Note 1) @ $T_A=25^{\circ}\text{C}$	$P_D$	200	mW
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150	$^{\circ}\text{C}$
Lead Solder Temperature – Maximum (10 Second Duration)	$T_L$	260	$^{\circ}\text{C}$

### Notes:

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

1. FR-5=1.0\*0.75\*0.62 in.



## 6. Electrical Characteristic ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Device	$V_{RWM}$ (V)	$I_R(\mu\text{A})$ @ $V_{RWM}$	$V_{BR}(\text{V})$ @ $I_T$ (Note 2)	$I_T$	$V_C(\text{V})$ @ $I_{PP}=1\text{A}$ (Note 3)	$V_C(\text{V})$ @ MAX $I_{PP}$ (Note 3)	$I_{PP}(\text{A})$ (Note 3)	$P_{PK}(\text{W})$ (Note 3)	$C(\text{pF})$	
	Max	Max	Min	mA	Max	Max	Max	Max	Typ	Max
LESD8LL5.0C	5	0.5	6	1	12	20	4	80	0.25	0.3

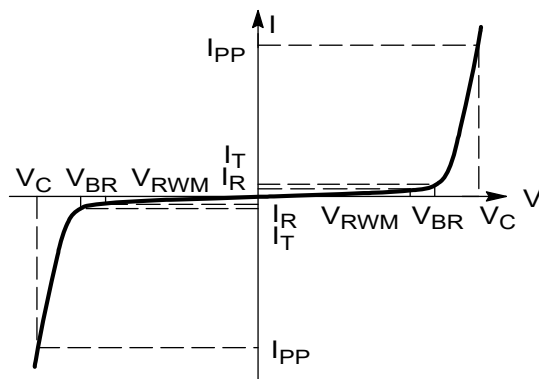
Notes:

Other voltage available upon request.

2.  $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of  $25^\circ\text{C}$ .

3. Surge current waveform per Figure 1.

## 7. Electrical Parameter ( $T_A=25^\circ\text{C}$ unless otherwise noted)

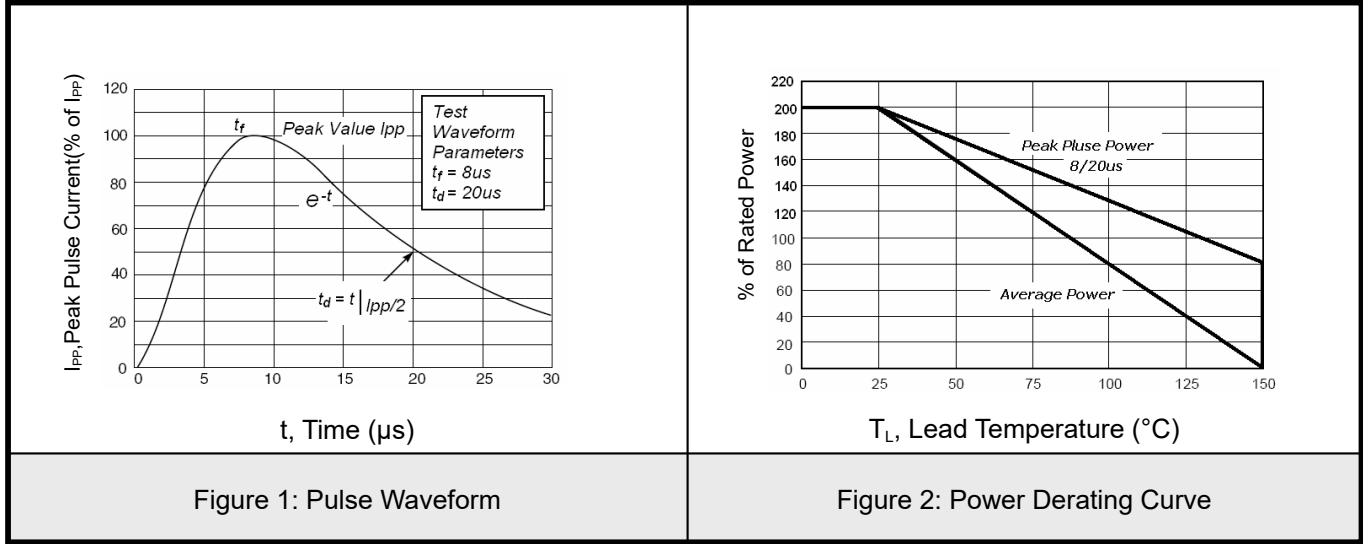


Bi-Directional TVS

Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$P_{PK}$	Peak Power Dissipation
$C$	Capacitance @ $V_R=0$ and $f=1.0\text{MHz}$

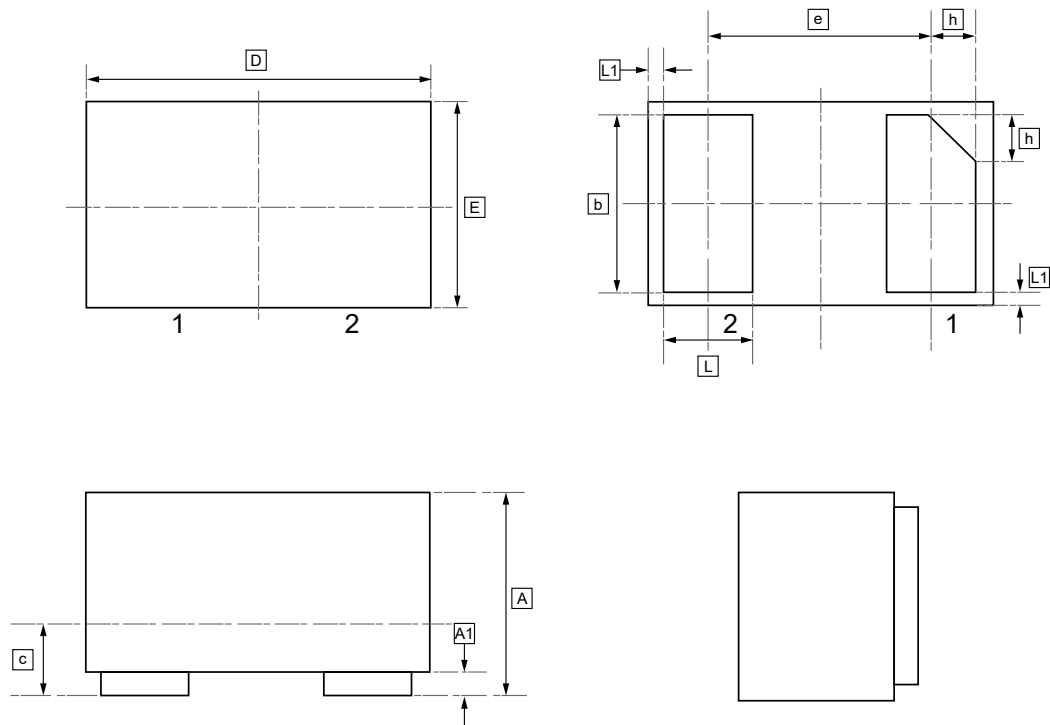


8. Typical characteristic





9.SOD-882 Package Outline Dimensions

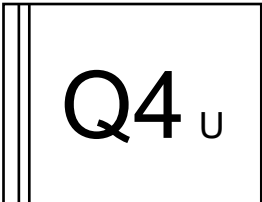


DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	b	c	D	e	E	L	L1	h
Min	0.45	0.00	0.45	0.12	0.95	0.65	0.55	0.20	0.05	0.07
Max	0.55	0.05	0.55	0.18	1.05	BSC	0.65	0.30	REF	0.17



10.Ordering information



Order Code	Package	Base QTY	Delivery Mode
UMW LESD8LL5.0CT5G	SOD-882	10000	Tape and reel



## 11.Disclaimer

UMW reserves the right to make changes to all products, specifications. Customers should obtain the latest version of product documentation and verify the completeness and currency of the information before placing an order.

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